UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,761	10/06/2006	Petri Jokela	P19221-US1	3827

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EXAMINER
VAUGHAN, MICHAEL R

ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 February 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23 and 31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23 and 31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 October 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

DETAILED ACTION

The instant application having Application No. 10/599,761 is presented for

examination by the examiner. Claims 1, 5, 6, 8, and 23 have been amended. Claims

24 and 25 has been canceled. Claims 26-30 were already canceled. Claim 31 has

been added.

Response to Amendment

Drawings

The newly filed drawings are accepted.

Specification

The specification amendments are acknowledged and accepted.

Abstract

The abstract amendments are acknowledged and accepted.

Information Disclosure Statement

Applicant submitted a copy of the one reference which was not considered on the

IDS filed 10/06/06. However, no additional IDS was submitted so Examiner could mark

the reference considered. For Applicant's convenience, Examiner has considered the

document and will list it on the enclosed PTO-892.

Claim Objections

The present amendments are sufficient in overcoming the previous claim

objections.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being

indefinite for failing to particularly point out and distinctly claim the subject matter which

applicant regards as the invention.

As per claim 1, it is unclear who or what is doing the steps of the method. The

preamble defined a first and second host and a gateway node. However, as amended,

none of the steps are indicative of what is performing the functions. For instance, which

party is storing the identifier? The dependent claims 2-22 are likewise rejected for at

least the same reason.

Response to Arguments

Applicant's arguments filed 2/24/09 have been fully considered but they are not persuasive. Applicant claims that Wall fails to teach "storing an identifier". Examiner respectfully disagrees. First with respect to storing an identifier in amended claim 1, there is no limitation which explicitly tied this function to any of the involved parties. The participating nodes generated long term keys which are the identifiers (see section II, 4-5 paragraphs). Clearly the identifiers are being stored by the first host. Also more evidence is provided in section III, part C, where Wall talks about the forward agent (performing the function of the gateway node) handles matching address to the HI in order to allow the HMN mobility. The HMN can maintain its HIT and frequently changes its IP address as long as the FA keeps tracks of the relationship between the IP and the HIT. The FA must be storing the HIT for this to occur. This reads on claims 23 and 31 where the identifier is stored at the gateway node. Examiner would also like to point out that as claimed by the independent claims, the identifier could be either the address or the HIT of Wall.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-4, 6-16, 19-20, 22, 23, and 31 are rejected under 35 U.S.C. 102(a) as

being anticipated by "Host Identity Protocol: Achieving IPv4 – Ipv6 handovers without

tunneling" by Wall et al. hereinafter Wall.

As per claim 1, Wall teaches a method of using the Host Identity Protocol (HIP)

to at least partially secure communications between a first host operating in a first

network environment and a second, HIP-enabled, host operating in a second network

environment, with a gateway node forming a gateway between the two environments,

the method comprising:

associating an identifier with the first host (pg. 2, 2nd col., paragraph 7), storing

the identifier (Fig. 2, I1, and section III-C);

sending the identifier to the first host (Fig. 2, R1);

receiving a session initiation messages from the first host, where a source

address of the session initiation message comprises the identifier and where the

session initiation message indicates that a destination of the session initiation message

is the second host (section III, part C); and

using the stored identifier at the gateway node to negotiate a secure HIP

connection to the second host (last page, second paragraph).

As per claim 2, Wall teaches the identifier is generated at the gateway node (Fig.

2, HIT R).

As per claim 3, Wall teaches the identifier is generated in response to the

sending of a context activation request from the first host to the gateway node (Fig. 2,

HIT R).

As per claim 4, Wall teaches the context activation request is a Packet Data

Protocol (PDP) context activation request to activate a PDP context, and the identifier is

used as the PDP address in the PDP context (Fig. 3, Packet Structure).

As per claim 6, Wall teaches the first host is HIP enabled and the secure HIP

connection is negotiated between the first and second hosts (pgs. 2-3, section II).

As per claim 7, Wall teaches the identifier is of the same length as an address in

the addressing scheme used by the first host for communication with the gateway node

(pg. 2, last two lines).

As per claim 8, Wall teaches the IP addressing scheme is used and the identifier

is used as the source IP address in the session initiation message (pg. 2, last two lines).

As per claim 9, Wall teaches the identifier is a look-up identifier associated with a

HIP identity tag generated for and associated with the first host, allowing the HIP

identity tag for the first host to be retrieved at the gateway node using the look-up

identifier (pgs. 2-3, HIT).

As per claim 10, Wall teaches the identifier is a HIP identity tag (pgs. 2-3).

As per claim 11, Wall teaches the HIP identity tag is included in a HIP header

during negotiation of the HIP connection between the gateway and the second host

(Fig. 3).

As per claim 12, Wall teaches the HIP identity tag is a Host Identity Tag (HIT) or a Local Scope Identifier (LSI) (Fig. 3).

As per claim 13, Wall teaches the HIP identity tag is generated from a key pair (pg. 2, last paragraph).

As per claim 14, Wall teaches the key pair which is stored in the gateway node for use during subsequent HIP communications between the gateway node and the second host (Fig. 2).

As per claim 15, Wall teaches the identifier is in the form of an IP address (pg. 2, last paragraph).

As per claim 16, Wall teaches the first network environment is a mobile network environment (pg. 4, section III).

As per claim 19, Wall teaches the second network environment is an Internet network environment (pg. 4, section III).

As per claim 20, Wall teaches the gateway node provides the functionality of a HIP proxy (pg. 4, section III and pg. 5, 4th paragraph).

As per claim 22, Wall teaches the identifier with an address associated with the gateway node as the source address in a subsequent message sent to the second host (pg. 4, section A).

As per claims 23 and 31, Wall teaches a communications system and apparatus comprising:

a first host operating in a first network environment (Fig. 4), a second, Host Identity Protocol (HIP) enabled, host operating in a second network environment (Fig.

4),

a gateway node forming a gateway between the two environments [forwarding agent],

　　　means for associating an identifier with the first host at the gateway node

(section III, C);

　　　means for storing the identifier at the gateway node (section III, C);

　　　means for sending the identifier to the first host (section III, C);

　　　means for receiving a session initiation messages from the first host, where a

source address of the session initiation message comprises the identifier and where the

session initiation message indicates that a destination of the session initiation message

is the second host (section III, part C); and

　　　means for using the stored identifier at the gateway node to negotiate a secure

HIP connection to the second host (last page, second paragraph).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set
forth in this Office action:
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth
in section 102 of this title, if the differences between the subject matter sought to be patented and the
prior art are such that the subject matter as a whole would have been obvious at the time the invention
was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability
shall not be negatived by the manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wall in

view of USP Application Publication 2004/0091117 to Narayanan, hereinafter

Narayanan.

As per claim 5, Wall teaches a secure communication between two HIP enabled

hosts. Wall is silent in discloses that one host is not a HIP enable host. Narayanan

teaches that gateways are put in between different types of network to that hosts in

each network can talk to one another (0008). One of the types of network Narayanan

discloses is the HIP network. Gateways in a sense, translate the messages pass

between hosts so that each host can understand the other. Therefore it would have

been obvious to one of ordinary skill in the art at the time of the invention to use

gateway nodes between HIP enabled hosts and non HIP enabled hosts because it

would allow many types of hosts to communication over a diverse and ever evolving

network. The claim would have been obvious because the technique for improving an

internetworking communication was part of the ordinary capabilities o a person of

ordinary skill in the art, in view of using gateways to translate message between

different types of network.

Claims 17, 18, and 21 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Wall in view of USP Application Publication 2002/0057662 to Lim.

As per claim 17, Wall is silent in disclosing a 3G mobile environment. Lim teaches using a gateway to connect a 3G mobile network to an IP network (0004). The notion that Wall's teaching is directed to mobility and Lim teaching a type of mobile network is easily recognizable. Claim 17 would have been obvious because a person of ordinary skill has good reason to pursue the known options within his or her technical graphs. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to try the 3G teaching of Lim with the HIP mobile network of Wall.

As per claim 18, Wall is silent in disclosing a UMTS mobile environment. Lim teaches using a gateway to connect a UMTS mobile network to an IP network (0004). The notion that Wall's teaching is directed to mobility and Lim teaching a type of mobile network is easily recognizable. Claim 18 would have been obvious because a person of ordinary skill has good reason to pursue the known options within his or her technical graphs. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to try the UMTS teaching of Lim with the HIP mobile network of Wall.

As per claim 21, Wall is silent in disclosing the gateway node is a GGSN. Lim teaches using a GGSN to connect a mobile network to an IP network (0004). The notion that Wall's teaching is directed to mobility and Lim teaching a type of mobile network is easily recognizable. Claim 21 would have been obvious because a person of ordinary skill has good reason to pursue the known options within his or her technical graphs. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to try the GGSN of Lim with the mobile network of Wall.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. VAUGHAN whose telephone number is (571)270-7316. The examiner can normally be reached on Monday - Thursday, 7:30am - 5:00pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on 571-272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R. V./

Examiner, Art Unit 2431

/Ayaz R. Sheikh/

Supervisory Patent Examiner, Art Unit 2431